

## TABLE OF CONTENTS

<b>DIVISION</b>		<b>PAGE</b>
<b>DIVISION 0 – BIDDING AND CONTRACT INFORMATION</b>		
	Bidder Checklist – Final Checklist Before Submitting Proposal	1
	Newspaper Advertisement	2
00020	Invitation to Bid	3
00100	Instructions to Bidder	4
00301	Bid Form	9
00430	Subcontractor Listing	11
00600	Bid Bond	12
	Prevailing Wage Determination	Insert
<b>DIVISION 1 – GENERAL REQUIREMENTS</b>		
01010	General Conditions	13
01011	Supplementary Conditions	16
01019	Contract Considerations	17
01039	Coordination and Meetings	19
01300	Submittals	22
01400	Quality Control	26
01500	Construction Facilities and Temporary Controls	29
01600	Materials and Equipment	32
01650	Starting of Systems	35
01700	Contract Closeout	37
<b>DIVISION 7 – THERMAL AND MOISTURE PROTECTION</b>		
07900	Joint Sealers	40
<b>DIVISION 8 – DOORS AND WINDOWS</b>		
08360	Sectional Overhead Doors	43
08720	Electric Door Operators	48
08800	Glazing	49

## BIDDER CHECKLIST

### FINAL CHECKLIST BEFORE SUBMITTING PROPOSAL

- \_\_\_\_\_ 1. The orange bound Request for Proposal includes a complete set of bidding forms, specifications, and appendices which are made part of the proposal by reference. It is for the bidders information and convenience only and is not to be returned with the proposal.
- \_\_\_\_\_ 2. The blue bound Proposal contains a complete set of bidding forms only. It is to be completed, executed and submitted in a sealed envelope marked "**District 5 - Sectional Overhead Door Replacement**"
  - \_\_\_\_\_ a. Complete the Bid Form by filling in the total dollar amount of the bid; listing any addenda which may have been issued; filling in the dollar amount of the bidder's check or Bid Bond, sign the proper signature line, and supply the required information in connection with the signature for the individual bidder, joint adventurer, or corporation.
  - \_\_\_\_\_ b. Submit Bid Bond executed by the bidder and surety. The bidder may use the Bid Bond furnished by the Commission or AIA Document A310 or approved equivalent or attach cashier's check to Bid Bond form. Personal checks are not accepted.
  - \_\_\_\_\_ c. Complete Subcontractor section by listing major subcontractor(s) and general supervisor(s), sign as required.
  - \_\_\_\_\_ d. Complete Certification Regarding Missouri Domestic Products Procurement Act section, if applicable.
- \_\_\_\_\_ 3. If addenda are issued attach to the back of the blue bound Proposal. Copy addenda and add to the appropriate section of the orange bound Request for Proposal and retain for your records.

## NEWSPAPER ADVERTISEMENT

### Notice to Contractors

Bids for constructing **Replacement of 34 sectional overhead doors at 6 different locations in District Five**, will be received by the Missouri Department of Transportation at it's **St. Mary's East Office located at 2211 St. Mary's Blvd., P.O. Box 270, Jefferson City, Missouri 65102, in the SME-2 Conference Room, until 1:00 p.m., October 12, 2004.** Proposal, contract forms, specifications, plans and information may be obtained from the **District 5 Office located at 1511 Missouri Blvd., Jefferson City in the General Services Manager Office beginning September 20, 2004.** A sum of \$10.00 will be charged for each set of plans. The amount paid for the plans is not refundable. Make checks payable to "Director of Revenue, Credit Road Fund." Prevailing wage as established by the Missouri Department of Labor and Industrial Relations, for **Callaway, Cole, Maries, Miller and Morgan Counties**, as shown in the proposal will apply. Bid awards shall be based on bids submitted and evaluated. Bid securities in the amount of 5% of the total bid submitted by the bidder are required to accompany bid.

A pre-bid conference is scheduled for **September 28, 2004** at the **District 5 Office located at 1511 Missouri Blvd., Jefferson City, in the Griffith Conference Room at 10:00 a.m.**

**SECTION 00020**

**INVITATION TO BID**

Notice is given hereby that the Missouri Department of Transportation will accept bids for construction of the proposal marked "**Sectional Overhead Door Replacement**", according to the Specifications.

Sealed bids will be received by the Missouri Department of Transportation at its **St. Mary's East Office located at 2211 St. Mary's Blvd., P.O. Box 270, Jefferson City, Missouri 65102, in the SME-2 Conference Room, until 1:00 p.m., October 12, 2004.**

Bids will be opened and read aloud at that time and that place. Bids received after that time will not be accepted.

Bidders may secure copies of the Proposal, Contract Forms, Specifications, and information from the **District 5 Office located at 1511 Missouri Blvd., Jefferson City in the General Services Manager Office beginning September 20, 2004.** A sum of \$10.00 will be charged for each set of plans. The amount paid for the plans is not refundable.

Prevailing wages as established by the Missouri Department of Labor and Industrial Relations, for **Callaway, Cole, Maries, Miller and Morgan Counties**, as shown in the Proposal, will apply.

Bid securities in the amount of 5% of the bid will be required to accompany bids.

Proposals must be made on forms provided by the Commission. The Commission reserves the right to reject any or all bids and to waive irregularity in the bids and the bidding. **No bid may be amended or withdrawn after the bid is opened.**

A pre-bid conference is scheduled for **September 28, 2004** at the **District 5 Office located at 1511 Missouri Blvd., Jefferson City, in the Griffith Conference Room at 10:00 a.m.**

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

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Building Design Supervisor

## SECTION 00100

### INSTRUCTIONS TO BIDDER

#### 1. SCOPE OF WORK

**Remove and dispose of 34 existing overhead doors, install 34 new sectional overhead doors and reconnect existing electric operators at six (6) locations in District Five.**

#### 2. BID FORM

In order to receive consideration, bids must be made in strict accordance with the following.

- A. Make bids, upon the forms provided herein, properly signed and with all items filled out. Do not change the wording of the bid form and do not add words to the bid form. Unauthorized conditions, limitations or provisions attached to the bid will be cause for rejection of the bid.
- B. No telegraphic bid or telegraphic modification of a bid will be considered. No bids received after the time fixed for receiving them will be considered. Late bids will be returned to the bidder unopened.
- C. Address bids to the Missouri Department of Transportation, and deliver to the address given in the Invitation to Bid, on or before the day and hour set for opening the bids. Enclose each bid in a sealed envelope bearing the title of the Work, the name of the bidder, and the date and hour of the bid opening. Submit only the original signed copy of the bid. It is the sole responsibility of the bidder to see that the bid is received on time.

#### 3. BONDS

- A. Bid securities, a cashiers check, a Bank Money Order, or a Certified Check made payable to "Director of Revenue, Credit Road Fund", in the amount stated in the invitation to bid must accompany each bid. The successful bidder's security will be retained until he has signed the Contract and has furnished the required Certificates of Insurance.
- B. The Owner reserves the right to retain the security of all bidders until the successful bidder enters into the Contract. Other bid securities will be returned as soon as practicable. If any bidder refuses to enter into a Contract, the Owner may retain his bid security as liquidated damages but not as a penalty.
- C. Prior to signing the Contract, the successful bidder will secure a Performance Bond in the amount of 100% of the Contract Sum. The bond shall be issued by Surety, acceptable to the Owner. Costs of such bonds will be the responsibility of the bidder.

#### 4. EXAMINATION OF DOCUMENTS AND SITE OF WORK

Before submitting a bid, each bidder shall read the Specifications and all other proposed Contract Documents, and visit the site of the work. Each bidder shall fully inform himself, prior to bidding, as to existing conditions and limitations under which the Work is to be performed and shall include in his bid a sum to cover the cost of items necessary to perform the Work, as set forth in the proposed Contract Documents. No allowance will be made to a bidder because of lack of such examination or knowledge. The submission of a bid will be considered conclusive evidence that the bidder has made such examination.

5. INTERPRETATION

No oral interpretations will be made to any bidder as to the meaning of the specifications or the acceptability of alternate products, materials, form or type of construction. Every request for interpretation shall be made in writing and submitted with all supporting documents not less than ten (10) calendar days before opening of bids. The request shall be sent directly to the project Designer. Every interpretation made to a bidder will be in the form of an addendum and will be sent as promptly as is practicable to all persons to whom specifications have been issued. All such addenda shall become part of the contract documents.

6. PROOF OF COMPETENCY OF BIDDER

A bidder may be required to furnish evidence, satisfactory to the Commission, that he and his proposed subcontractor(s) have sufficient means and experience in the types of work called for to assure completion of the Contract in a satisfactory manner.

7. WITHDRAWAL OF BIDS

- A. A bidder may withdraw his bid, either personally or by written request, at any time prior to the scheduled time for opening bids.
- B. No bid may be amended or withdrawn after the bid is opened.

8. AWARD OR REJECTION OF BIDS

- A. The Contract, if awarded, will be awarded to the responsible bidder who has proposed the lowest Contract Sum, subject to the Commission's right to reject any or all bids and to waive informality and irregularity in the bids and in the bidding.
- B. Award of alternates, if any, will be made in numerical order to result in the maximum amount of work being accepted within available construction funds.
- C. Bidder's proposal price shall include all city, state, and federal sales, excise and similar taxes which may be lawfully assessed in connection with his performance of work and purchase of materials to be incorporated in the work.

9. EXECUTION OF CONTRACT

- A. The Contract, which the successful bidder will be required to execute, will be included in the Contract Documents.
- B. The bidder to whom the Contract is awarded shall, within fourteen calendar days after notice of award and receipt of Contract Documents from the Commission, sign and deliver required copies to the Commission.
- C. Upon delivery of the signed Contract, the bidder to whom the Contract is awarded shall deliver to the Commission those Certificates of Insurance required by the Contract Documents and Performance Bond, as required by the Commission.
- D. Execution of the Contract by the Commission must be done before the successful bidder may proceed with the work.

10. CONSTRUCTION TIME AND LIQUIDATED DAMAGES

- A. Time of Completion - If this proposal is accepted, it is hereby agreed that work will begin not later than the date specified in the "Notice to Proceed" and will diligently be prosecuted in order to complete the work and billing within **40 working days** from the date specified. Completion of work will be based on FINAL ACCEPTANCE of the building; "SUBSTANTIAL COMPLETION" will not be accepted as basis for completion.
- B. Liquidated Damages - It is agreed that time is of the essence. Because failure to complete the contract within the time fixed herein will cause serious inconvenience, loss, and damage to the state, liquidated damages will be assessed in the amount of **\$150.00** per working day, for each working day after the agreed completion date that the Work is not fully completed.

11. MISSOURI NONDISCRIMINATION CLAUSE

The Company shall comply with all the provisions of Executive Order No. 94-03, issued by the Honorable Mel Carnahan, Governor of Missouri, on the fourteenth (14) day of January 1994, which executive order is incorporated herein by reference and is made a part of this agreement. This Executive Order promulgates a Code of Fair Practices for the Executive Branch of Missouri Government and prohibits discrimination against recipients of services and employees or applicants of employee of state contractors and subcontractors, on the ground of race, color, religion, national origin, sex, age, disability or veteran status. The Company shall also comply with all state and federal statutes applicable to Company relating to nondiscrimination, including, but not limited to, Chapter 213, RSMo; Title VI and Title VII of the Civil Rights Act of 1964 as amended (42 U.S.C. Sections 2000d and 2000e, et. seq.); and with any provision of the "Americans with Disabilities Act" (42 U.S.C. Section 1210 et. seq.).

12. BIDDERS CERTIFICATION

- A. Preference in Purchasing Products: - Sections 34.073 and 34.076 RSMo 1994 give preference to Missouri corporations, firms, and individuals, when letting contracts or purchasing products. All bids will be evaluated on the basis of Sections 34.073 and 34.076 RSMo 1994. Any successful bidder which is a corporation organized in a state other than Missouri shall furnish to the owner, attached to the Proposal, a properly certified copy of its current Certificate of Authority to do business in the State of Missouri, such certificate to remain on file with the Commission. No Contract will be awarded by the Commission unless such certificate is furnished by the bidder.
- B. Any successful bidder which is a corporation organized in the State of Missouri shall furnish, at its own cost, if requested, a Certificate of Good Standing issued by the Secretary of State, such certificate to remain on file with the owner.
- C. If the successful bidder is doing business in the State of Missouri under a fictitious name, he shall furnish to the Commission, attached to the Proposal, a properly certified copy of the certificate of Registration of Fictitious Name from the State of Missouri, such certificate shall remain on file with the Commission. No contract will be awarded by the Commission until such certificate is furnished by the bidder.

D. Certification Regarding Missouri Domestic Products Procurement Act: - The bidder's attention is directed to the Missouri Domestic Products Procurement Act, Sections 34.350 to 34.359, RSMo. which requires all manufactured goods or commodities used or supplied in the performance of this contract or any subcontract to be manufactured or produced in the United States. Section 34.350, RSMo, does not apply if the total contract is less than One Thousand Dollars (\$1,000.00). Section 34.355, RSMo, requires the vendor or contractor to certify his compliance with Section 34.353 and, if applicable, Section 34.359, RSMo, at the time of bidding and prior to payment. Failure to comply with Section 34.353, RSMo, during performance of the contract and to provide certification of compliance prior to payment will result in nonpayment for those goods or commodities.

Failure to complete this document will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis.

[ ] If all the goods or products specified in the attached bid which the bidder proposes to supply to the State shall be manufactured or produced in the "United States" as defined in Section 34.350, RSMo, check the box at left.

[ ] If only one line of any particular goods or products specified in the attached bid is manufactured or produced in the "United States" as defined in Section 34.350, RSMo, check the box at left and list the item(s) here:

\_\_\_\_\_  
 \_\_\_\_\_

[ ] If any or all of the goods or products specified in the attached bid which you proposed to supply to the State are not manufactured or produced in the "United States" as defined in Section 34.350, RSMo, then: (a) check the box at left; (b) list below by item number the country other than the United States where each goods or product you propose to furnish is manufactured or produced; and (c) check the box(es) at left of the paragraphs below if applicable, and list the corresponding item numbers in the spaces provided.

Item	Location Where Manufactured or Produced
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(use additional sheet if necessary)



- [ ] The following specified goods or products cannot be manufactured or produced in the United States in sufficient quantities or in time to meet the contract specifications.

Item	Location Where Manufactured or Produced
_____	_____
_____	_____

- [ ] The following specified goods or products must be treated as manufactured or produced in the United States, in accordance with an existing treaty, law, agreement or regulation of the United States, including a treaty between the United States and any foreign country regarding export-import restrictions or international trade.

Item	Location Where Produced or Manufactured
_____	_____
_____	_____

#### CERTIFICATION

By submitting this document, completed as directed above, with a bid, the bidder certifies under penalty of making a false declaration (Section 575.060, RSMo) that the information contained in this document is true, correct and complete and may be relied upon by the State in determining the bidders qualifications under and compliance with the Missouri Products Procurement Act.

The bidder's failure to complete this document as directed above will cause the State to presume the manufactured goods or products listed in the bid are not manufactured in the United States and the bid will be evaluated on that basis pursuant to section 34.353.3(2), RSMo

**SECTION 00301**

**BID FORM**

To:               The Missouri Highway and Transportation Commission  
                    105 West Capitol Avenue  
                    Jefferson City, Missouri 65101

The undersigned, having examined the proposed Contract Documents titled: "**Sectional Overhead Door Replacement**" and having visited the site and examined the conditions affecting the Work, hereby proposes and agrees to furnish all labor, materials, equipment and everything which may be necessary or incidental thereto, as proposed by said Contract Documents, all to the satisfaction of the Chief Engineer of the Missouri Department of Transportation and the Missouri Highway and Transportation Commission, for the stipulated sum of:

Belle \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_).

Brazito \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_).

Eldon \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_).

Iberia \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_).

New Bloomfield \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_).

Stover \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_).

**TOTAL BID (BASIS FOR BID AWARD)**

\_\_\_\_\_ DOLLARS (\$\_\_\_\_\_).

2.       The undersigned, acknowledges having examined and being familiar with the contract documents including the Instructions to Bidders, General Conditions, Supplementary Conditions and the body of technical specifications.
3.       The undersigned acknowledges receipt of Addenda number \_\_\_\_\_ through \_\_\_\_\_ inclusive.
4.       Enclosed with this bid is bid security in the amount of not less than 5% of the bidder's proposed Contract Sum, the amount being \_\_\_\_\_ DOLLARS (\$\_\_\_\_\_).

**IF AN INDIVIDUAL**

\_\_\_\_\_  
Name of individual

\_\_\_\_\_  
Residence address

\_\_\_\_\_  
Social Security Number

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Firm Name, If Any

\_\_\_\_\_  
Address for communications

\_\_\_\_\_  
Signature

**IF A PARTNERSHIP**

_____ Name of Partnership	(State Name and Residence Address of All Partners) _____
_____ Partner	_____ Residence Address
_____ Partner	_____ Residence Address
_____ Address for Communications	_____ Federal Tax I.D. Number
_____ Telephone Number	_____ Signature of Either Partner

**IF A CORPORATION**

_____ Name of Corporation	Incorporated under the laws of the State of _____
_____ Name and Title of Officer	Corporate License No. _____ (If a corporation organized in a state other than Missouri, attach Certificate of Authority to do business in the State of Missouri.)
_____ Signature of officer	_____ Federal Tax I.D. Number
_____ Address for Communications	(ATTEST)
_____ Telephone Number	_____ (SEAL) Secretary

(Each bidder must complete the Bid Form by signing in the proper signature line above and by supplying the required information called for in connection with the signature. The information called for is necessary in the proper preparation of the contract and performance bond.)

**SECTION 00430**

**SUBCONTRACTOR LISTING**

1. For portions of the Work equaling or exceeding 1% of the total proposed Contract Sum, the undersigned proposes to use the following subcontractors. Except as otherwise approved by the Owner, the undersigned proposes to perform all other portions of the Work with his own forces.

2. Portion of the Work: Subcontractor name and address:

_____	_____
	_____
	_____
_____	_____
	_____
	_____
_____	_____
	_____
	_____
_____	_____
	_____
	_____
_____	_____
	_____
	_____

USE ADDITIONAL SHEETS  
IF REQUIRED

PROVIDE SIGNATURE  
IDENTICAL TO THAT  
SHOWN ON THE BID FORM

BIDDER:

\_\_\_\_\_

by \_\_\_\_\_

**SECTION 00600**

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we \_\_\_\_\_,  
as Principal, and \_\_\_\_\_,  
as Surety, are held firmly bound unto the State of Missouri (acting by and through the Missouri Highway and  
Transportation Commission) in the penal sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_),  
to be paid to the State of Missouri, or the Missouri Highway and Transportation Commission, to be credited to the  
State Road Fund and Principal and Surety binding themselves, their heirs, executors, administrators, successors and  
assigns, jointly and severally, firmly by these presents.

Sealed with our seals and dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_

THE CONDITION OF THIS OBLIGATION is such that:

WHEREAS, the Principal is submitting herewith a bid to the Missouri Highway and Transportation Commission on  
Route(s) \_\_\_\_\_,  
in \_\_\_\_\_ County(ies), Project(s) \_\_\_\_\_,  
for construction or improvement as set out in said proposal.

NOW THEREFORE, if the Missouri Highway and Transportation Commission shall accept the bid of the Principal,  
and if said Principal shall properly execute and deliver to the Missouri Highway and Transportation Commission the  
Contract, Contract Bond, Specifications and evidence of insurance coverage in compliance with the requirements of  
the Proposal, to the satisfaction of the Missouri Highway and Transportation Commission, then this obligation shall  
be void and of no effect, otherwise to remain in full force and effect.

In the event the said Principal shall, in the judgment of the Missouri Highway and Transportation Commission, fail to  
comply with any requirement as set forth in the preceding paragraph, then the State of Missouri, acting through the  
Missouri Highway and Transportation Commission, shall immediately and forthwith be entitled to recover the fees,  
and any other expense of recovery.

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

By \_\_\_\_\_

\_\_\_\_\_  
Attorney in Fact (SEAL)

Attest: (CORPORATE SEAL)

\_\_\_\_\_  
Corporate Secretary

Note: This bond must be executed by the Principal and by a Corporate Surety authorized to conduct  
surety business in the State of Missouri.

**SECTION 01010**  
**GENERAL CONDITIONS**

1. General. The contractor shall do all things necessary to the performance of the contract in a substantial and acceptable manner in accordance with the specifications and plans.
2. Employer's Liability. Contractor shall furnish evidence to the Commission that with respect to the operations it performs, it either carries employers liability or worker's compensation insurance or is qualified as self-insured under the provisions of law of the state relating to worker's compensation.
3. Contractor's Bodily Injury Liability and Property Damage. The contractor shall furnish evidence to the Commission that with respect to the operations that it performs, it carries regular contractor's bodily injury liability insurance providing for a limit of not less than \$50,000 for all damages arising out of bodily injuries to or death of, one person and subject to that limit for one person, a total limit of \$100,000 for all damages arising out of bodily injuries to, or death of, two or more persons in one accident, and regular contractor's property liability damage insurance providing for a limit of not less than \$25,000 for all damages arising out of injury to, or destruction of, property in any one accident and subject to that limit per accident, a total or aggregate limit of \$100,000 for all damages arising out of injury to, or destruction of, property during the policy period. Policy requirements shall be such that insurance provided in compliance with contractor's bodily injury liability and property damage liability insurance shall cover liability of the contractor for damage because of bodily injury to, or death of, persons and injury to or destruction of, property which may be suffered by persons other than his own employees as a result of the negligence of the contractor in performing the work covered by this contract. Policy requirements shall also be such that insurance provided in compliance with contractor's property damage liability insurance shall include liability of the contractor for damage to, or destruction of property which may be suffered by persons other than its own employees as a result of blasting operations of the contractor in performing the work covered by this contract. If any part of the work is sublet, similar insurance shall be provided by or on behalf of all subcontractors to cover their operations.
4. Contractor's Protective Public Liability and Property Damage Liability Insurance. The contractor shall furnish evidence to the Commission that with respect to the operations performed for it by subcontractors, it carries in its own behalf regular contractor's protective bodily injury liability insurance providing for a limit of not less than \$400,000 for all damages arising out of bodily injury to, or death of, one person and subject to that limit for each person a total limit of \$2,500,000 for all damages arising out of bodily injuries to, or death of, two or more persons in any one accident, and regular contractor's protective property damage liability insurance providing for a limit of not less than \$400,000 for all damages arising out of injury to or destruction of, property in any one accident and subject to that limit per accident a total or aggregate limit of \$2,500,000 for all damages arising out of injury to, or destruction of, property during the policy period.
5. Duration of Insurance. The evidence of insurance required by sections 2, 3, and 4 above shall be furnished to the Commission prior to the effective date of the Notice to Proceed. All insurance herein before specified shall be carried until all work required to be performed under the terms of the contract is satisfactorily completed as evidenced by the formal acceptance by the Commission and in the event that the limits of coverage for property damage are depleted or decreased by the payment of claims, the contractor shall procure a reinstatement of the limits. The cost of all insurance required to be carried by the contractor shall be considered as completely covered by the contract price.
6. Inspection of Work. Commission's engineer shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials and other data and records relating to the work. If requested by Commission's engineer, the contractor shall at any time before final acceptance of the work uncovers any portion of the finished work as directed for inspection. After examination, the contractor shall restore said portions of the work to the standards required by the contract. Should the work thus exposed and examined prove acceptable, the actual cost of uncovering, removing and replacing shall be paid by the Commission. Should the work so exposed and examined prove unacceptable, the uncovering, removing and replacing shall be at the expense of the contractor.

7. Change Orders. All departures from the plans and specifications will be considered unauthorized unless, before proceeding with the work, the contractor has had delivered to it a change order, signed by the Commission's engineer, authorizing and directing such changes or departures. All unauthorized work shall be at the contractor's expense and the engineer may order such unauthorized work removed and replaced at the contractor's expense.
8. Defective Work. All work which has been rejected shall be remedied, or if necessary, removed and replaced in an acceptable manner by the contractor at its expense. If the contractor fails to remedy or replace such defective work immediately after receiving written notice from the Commission's engineer, Commission may employ labor to correct the defective work, and the cost incurred in making such corrections shall be deducted from the payment due or to become due the contractor under this contract.
9. Contractor's Responsibility for Work. Until the work is accepted by Commission's engineer, it shall be in the custody and under the charge and care of the contractor. Contractor shall rebuild, repair, restore or make good at its own expense any lost or stolen Commission-owned material and all injuries or damages to any portion of the work caused by action of the elements or from any other reason before its completion and final acceptance. Issuance of a payment estimate on any part of the work done will not be considered as final acceptance of any work completed up to that time.
10. Preservation of Utilities and Monuments. The contractor shall be responsible for the preservation of all public and private utilities, wires, lines, pipes, poles, cables, and conduit at the site of the work and shall use every precaution necessary to prevent damage or injury thereto. The contractor shall not disturb or damage any land monument or property landmark until an authorized agent has witnessed or otherwise referenced, their location and shall not remove them until directed by Commission's engineer.
11. Cooperation with Other Contractors. The contractor shall arrange its work so as not to interfere with the operations of other contractors of the Commission which might be engaged in performing adjacent or nearby work. Whenever work being done by other contractors is contiguous or related to the work involved in this contract, the respective rights of the various contractors will be determined by the Commission's engineer in order to secure the completion of the work under all contracts in general harmony.
12. Temporary Suspension of Work. Commission's engineer shall have authority to suspend work, wholly or in part, for such period or periods of time as he may deem necessary when weather or other conditions are such that in the opinion of the engineer the work may be done at a later time with advantage to the Commission or for failure on the part of the contractor to comply with any of the provisions of the contract. The contractor may suspend work for reasonable cause with written approval of the engineer. Liquidated damages shall not accrue during the period in which work is suspended with the approval of the engineer, however, if the suspension is because of the contractor's failure to comply to any of the provisions of the contract, the contractor shall not be entitled to an extension of completion time nor to a waiver of liquidated damages. In the event work is suspended, the contractor shall store all materials in a manner that will protect them from damage, and shall take every precaution to prevent damage or deterioration of, the portions of the work completed. If work has been discontinued for any reason, the contractor shall give Commission's engineer written notice at least forty-eight (48) hours before resuming operations.
13. Contractor's Procedure for Claims. If the contractor considers additional compensation may be due for work or material not clearly covered in the contract or ordered in writing by the engineer as extra work, or if additional compensation may be requested beyond the scope of such provisions, the contractor shall notify the engineer in writing of the intention to make a claim before beginning the work in question. If notification is not given and the engineer is not afforded proper facilities by contractor to provide necessary inspection and for keeping strict account of actual cost, the contractor agrees to waive any claims for additional compensation. Notice by the contractor, and the fact that the engineer has kept account of the cost shall not be construed as substantiating the validity of the claim. The contractor shall file a written notice of claim for additional compensation in triplicate within 60 days after completing the work in question.

If the claim is against the Commission, the notice of claim shall be personally delivered, or sent by certified mail to the office of the Secretary of the Commission in Jefferson City, Missouri. All notices of claims shall contain an itemized statement showing completely and fully the items and amounts forming the basis of the claim.

Any claim or an item of any claim, not included in the notice and statement, or any claim included but not clearly defined and specifically set out and itemized or any claim not filed within the time and in the manner provided, shall be forever waived and shall neither constitute the basis of nor be included in any legal action, counterclaim, set-off, or arbitration.

All claims filed with Missouri Highway and Transportation Commission's Secretary will be forwarded to the Missouri Department of Transportation's Claims Committee.

14. Overhead and Profit on Change Orders. The percentages for overhead and profit charged on Change Orders and Field Work Authorizations shall be negotiated and may vary according to the nature, extent and complexity of the work involved. However, the overhead and profit for the contractor or subcontractor actually performing the work shall not exceed 15%. When one or more tiers of subcontractors are used, in no event shall any contractor or subcontractor receive as overhead and profit more than 7% of the cost of the work performed by any of his subcontractors. In no case shall the total overhead and profit paid by the owner on any change order exceed twenty five percent (25%) of the cost of materials, labor and equipment necessary to put the change order work in place.
15. Review of Submittals. The architect's review of submittals is only for the limited purpose of checking for conformance with information given and seeing if they conform to design intent. The architect is not responsible for determining the accuracy of measurements and completeness of details, for verifying quantities, or for checking fabrication or installation procedures. The architect's review does not relieve the contractor of his or her responsibilities under the contract documents.
16. A working day. Is defined as any day when, soil and weather conditions would permit the major operation of the project for six hours or over unless other unavoidable conditions prevent the contractor's operation. If conditions require the contractor to stop work in less than six hours, the day will not be counted as a working day.

**END OF SECTION**



## SECTION 01011

### SUPPLEMENTARY CONDITIONS

- A. The following supplements modify, change, delete from or add to the "General Conditions."
1. The proposed work includes the furnishing of all materials, equipment and labor for the work as set forth in the plans, proposal and specifications.
  2. The contractor will be required to remove from the Highway and Transportation Commission's property all debris.
  3. **The contractor will pay all sales and use taxes that constitute a legal obligation arising out of this work.**
  4. The contract price shall include any necessary permits and licenses required by law incidental to the work. Local ordinances requiring building permits are not applicable to the state. Contractor will comply with local laws involving safety in the prosecution of the work.
  5. Contractor will provide a one year warranty for parts and labor on all building material, and equipment or a standard manufacturer's warranty which ever is greater. All warranties, including extended service agreements shall begin on the date of Final Acceptance of this project.
  6. The plans holders list may be obtained from the **District Five Office** by calling **(573) 751-3660**.
- B. DEFINITIONS
1. Construction Inspector: When the term "Construction Inspector" is used herein, it shall refer to Coleen Welter, Missouri Department of Transportation, General Services Division, (573) 751-3660, FAX (573) 526-6796.

**END OF SECTION**

## **SECTION 01019**

### **CONTRACT CONSIDERATIONS**

#### **PART 1                      GENERAL**

##### **1.1                      SECTION INCLUDES**

- A.        Schedule of values.
- B.        Application for payment.
- C.        Change procedures.
- D.        Alternatives.

##### **1.2                      RELATED SECTIONS**

- A.        Section 01600 - Material and Equipment: Product substitutions.

##### **1.3                      SCHEDULE OF VALUES**

- A.        Submit a printed schedule on Contractor's standard form. Electronic media printout will be considered.
- B.        Submit Schedule of Values in duplicate within 20 days after date of Owner-Contractor Agreement.
- C.        Revise schedule to list approved Change Orders, with each Application For Payment.

##### **1.4                      APPLICATIONS FOR PAYMENT**

- A.        Submit four copies of each application on Contractor's electronic media driven form.
- B.        Content and Format: Utilize Schedule of Values for listing items in Application for Payment.
- C.        Payment Period: 30 days.
- D.        Submit waiver of liens from vendors.
- E.        Include an updated construction progress schedule.
- F.        Certified payroll records.

##### **1.5                      CHANGE PROCEDURES**

- A.        The Architect/Engineer may issue a Notice of Change that includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required.
- B.        The Contractor may propose changes by submitting a request for change to the Architect/Engineer, describing the proposed change and its full effect on the Work. Include a statement describing the reason for the change, the effect on the Contract Sum/Price and Contract Time, and a statement describing the effect on Work by the MoDOT District or other Contractors.
- C.        Stipulated Sum/Price Change Order: Based on Notice of Change and Contractor's fixed price quotation or Contractor's request for a Change Order as approved by Architect/Engineer.

- D. Construction Change Directive: Architect/Engineer may issue a directive instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.  
Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute the change.
- E. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract. Architect/Engineer will determine the change allowable in Contract Sum/Price and Contract Time as provided in the Contract Documents.
- F. Maintain detailed records of work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.
- H. Execution of Change Orders: Architect/Engineer will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

1.6

DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.
- B. If, in the opinion of the Architect/Engineer, it is not practical to remove and replace the Work, the Architect/Engineer will direct an appropriate remedy or adjust payment.

1.7

ALTERNATIVES

- A. Accepted Alternatives will be identified in Owner-Contractor Agreement.

**END OF SECTION**

## **SECTION 01039**

### **COORDINATION AND MEETINGS**

#### **PART 1                      GENERAL**

##### **1.1                      SECTION INCLUDES**

- A.      Coordination and project conditions.
- B.      Field engineering.
- C.      Preconstruction meeting.
- D.      Site mobilization meeting.
- E.      Progress meetings.
- F.      Preinstallation meetings.
- G.      Equipment electrical characteristics and components.
- H.      Examination.
- I.      Preparation.
- J.      Cutting and Patching.
- K.      Alteration project procedures.

##### **1.2                      COORDINATION AND PROJECT CONDITIONS**

- A.      Coordinate scheduling, submittals, and Work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements.
- B.      Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to and placing in service, such equipment.
- C.      Coordinate space requirements, supports, and installation of mechanical and electrical Work, which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D.      In finished areas, except as otherwise indicated, conceal pipes, ducts and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- E.      Coordinate completion and clean up of Work of separate sections in preparation for Substantial Completion.
- F.      After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

##### **1.3                      FIELD ENGINEERING**

- A.      Employ a Land Surveyor registered in the State of Missouri and acceptable to Architect/Engineer.
- B.      Owner will locate and protect survey control and reference points.
- C.      Control datum for survey is that established by Owner provided survey.
- D.      Verify set-backs and easements; confirm drawing dimensions and elevations.
- E.      Provide field engineering services. Establish elevations, lines and levels, utilizing recognized engineering survey practices.

1.4

#### PRECONSTRUCTION MEETING

- A. Architect/Engineer will schedule a meeting after Notice of Award.
- B. Attendance Required: District engineer or representative, Architect/Engineer and Contractor.
- C. Record minutes and distribute copies within 5 days after meeting to participants, with two copies to District Engineer, Architect/Engineer, participants and those affected by decisions made.

1.5

#### SITE MOBILIZATION MEETING

- A. Architect/Engineer will schedule a meeting at the Project site prior to Contractor occupancy.
- B. Record minutes and distributes copies within 5 days after meeting to participants, with two copies to Architect/Engineer, participants and those affected by decisions made.

1.6

#### PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at when arranged by architect/engineer.
- B. Architect/Engineer will make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required: Job superintendent, major Subcontractors and suppliers, District engineer representative, Architect/Engineer, as appropriate to agenda topics for each meeting.
- D. Agenda:
  - 1. Review of Work progress.
  - 2. Field observations, problems, and decisions.
  - 3. Identification of problems, which impede planned progress.
  - 4. Maintenance of progress schedule.
  - 5. Corrective measures to regain projected schedules.
  - 6. Coordination of projected progress.
  - 7. Effect of proposed changes on progress schedule and coordination.
- E. Record minutes and distributes copies within 5 days after meeting to participants and those affected by decisions made.

1.7

#### PREINSTALLATION MEETING

- A. When required in individual specification sections, convene a pre-installation meeting at the site prior to commencing work of the section.
- B. Notify Architect/Engineer seven days in advance of meeting date.
- C. Prepare agenda and preside at meeting:
  - 1. Review conditions of installation, preparation and installation procedures.
  - 2. Review coordination with related work.
- D. Record minutes and distributes copies within 5 days after meeting to participants and those affected by decisions made.

**PART 2**

**PRODUCTS**

Not used

**PART 3**

**EXECUTION**

3.1

**CUTTING AND PATCHING**

- A. Employ skilled and experienced installer to perform cutting and patching.
- B. Submit written request in advance of cutting or altering elements, which affect:
  - 1. Structural integrity of element.
  - 2. Integrity of weather-exposed or moisture-resistant elements.
  - 3. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching to complete Work, and to:
  - 1. Uncover Work to install or correct ill-timed Work.
  - 2. Remove and replace defective and non-conforming Work.
  - 3. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Cut masonry and concrete materials using masonry saw or core drill.
- E. Fit Work tight to pipes, sleeves, ducts, conduit and other penetrations through surfaces.
- F. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- G. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.
- H. Identify hazardous substances or conditions exposed during the Work to the Architect/Engineer for decision or remedy.

3.2

**ALTERATION PROJECT PROCEDURES**

- A. Materials: Treated material match existing products and work for patching and extending work.
- B. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.
- C. When finished surfaces are cut so that a smooth transition with new Work is not possible, terminate existing surface along a straight line at a natural line of division and submit recommendation to Architect/Engineer for review.
- D. Replace portions of existing track blocking that are damaged, rotted, or would otherwise prevent attachment of overhead door tracks. It is the contractors responsibility to examine and verify prior to bidding. Replace with treated lumber to match existing and install with approved fasteners.

**END OF SECTION**

## **SECTION 01300**

### **SUBMITTALS**

#### **PART 1                      GENERAL**

##### **1.1                      SECTION INCLUDES**

- A.        Submittal procedures.
- B.        Construction progress schedules.
- C.        Proposed Products list.
- D.        Product Data.
- E.        Shop Drawings.
- F.        Samples.
- G.        Design data.
- H.        Test reports.
- I.        Certificates.
- J.        Manufacturer's instructions.
- K.        Manufacturer's field reports.
- L.        Erection drawings.
- M.        Construction photographs.

##### **1.2                      RELATED SECTIONS**

- A.        Section 01300 - Submittals
- B.        Section 01400 - Quality Control: Manufacturers' field services and reports.
- C.        Section 01700 - Contract Closeout: Contract warranties, bonds, manufacturers' certificates and closeout submittals.

##### **1.3                      REFERENCES**

- A.        AGC Associated General Contractors of America publication "The Use of CPM in Construction  
- A Manual for General Contractors and the Construction Industry".

##### **1.4                      SUBMITTAL PROCEDURES**

- A.        Transmit each submittal with Architect/Engineer accepted form.
- B.        Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number and specification section number, as appropriate.
- C.        Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- D.        Schedule submittals to expedite the Project, and deliver to Architect/Engineer at business address. Coordinate submission of related items.
- E.        For each submittal for review, allow 15 days excluding delivery time to and from the contractor.

- F. Identify variations from Contract Documents and Product or system limitations, which may be detrimental to successful performance of the completed Work.
- G. Submittals not requested will not be recognized or processed.

#### 1.5 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit initial schedule in duplicate within 15 days after date established in Notice to Proceed.
- B. Revise and resubmit as required.
- C. Submit revised schedules with each Application for Payment, identifying changes since previous version.
- D. Submit a horizontal bar chart with separate line for each major portion of Work or operation, identifying first workday of each week.

#### 1.6 PROPOSED PRODUCTS LIST

- A. Within 15 days after date of Notice to Proceed, submit list of major products proposed for use, with name of manufacturer, trade name and model number of each product.
- B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation and reference standards.

#### 1.7 PRODUCT DATA

- A. Product Data For Review:
  - 1. Submitted to Architect/Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
  - 2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article above and for record documents purposes described in Section 01700 - CONTRACT CLOSEOUT.
- B. Product Data For Information:
  - 1. Submitted for the Architect/Engineer's knowledge as contract administrator or for the Owner.
- C. Product Data For Project Close-out:
  - 1. Submitted for the Owner's benefit during and after project completion.
- D. Submit the number of copies, which the Contractor requires, plus two copies that will be retained by the Architect/Engineer.
- E. Mark each copy to identify applicable products, models, options and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- F. After review distribute in accordance with the Submittal Procedures article above and provide copies for record documents described in Section 01700 - CONTRACT CLOSEOUT.



1.8

SHOP DRAWINGS

- A. Shop Drawings For Review:
  - 1. Submitted to Architect/Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
  - 2. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article above and for record documents purposes described in Section 01700 - CONTRACT CLOSEOUT.
- B. Shop Drawings For Information:
  - 1. Submitted for the Architect/Engineer's knowledge as contract administrator or for the Owner.
- C. Shop Drawings For Project Close-out:
  - 1. Submitted for the Owner's benefit during and after project completion.
- D. Indicate special utility and electrical characteristics, utility connection requirements and location of utility outlets for service for functional equipment and appliances.
- E. Submit in the form of one reproducible transparency and one opaque reproduction.

1.9

SAMPLES

- A. Samples For Review:
  - 1. Submitted to Architect/Engineer for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
  - 2. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article above and for record documents purposes described in Section 01700 - CONTRACT CLOSEOUT.
- B. Samples For Information:
  - 1. Submitted for the Architect/Engineer's knowledge as contract administrator or for the Owner.
- C. Samples For Selection:
  - 1. Submitted to Architect/Engineer for aesthetic, color, or finish selection.
  - 2. Submit samples of finishes for Architect/Engineer selection.
  - 3. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article above and for record documents purposes described in Section 01700 - CONTRACT CLOSEOUT.

1.10

DESIGN DATA

- A. Submit for the Architect/Engineer's knowledge as contract administrator or for the Owner.
- B. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

1.11

TEST REPORTS

- A. Submit for the Architect/Engineer's knowledge as contract administrator or for the Owner.
- B. Submit test reports for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

1.12

#### CERTIFICATES

- A. When specified in individual specification sections, submit certification by the manufacturer, installation/application subcontractor, or the Contractor to Architect/Engineer, in quantities specified for Product Data.
- B. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or Product but must be acceptable to Architect/Engineer.

1.13

#### MANUFACTURER'S INSTRUCTIONS

- A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting and finishing, to Architect/Engineer for delivery to owner in quantities specified for Product Data.
- B. Indicate special procedures, perimeter conditions requiring special attention and special environmental criteria required for application or installation.
- C. Refer to Section 01400 - Quality Control, Manufacturers' Field Services article.

1.14

#### MANUFACTURER'S FIELD REPORTS

- A. Submit reports for the Architect/Engineer's benefit as contract administrator or for the Owner.
- B. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

1.15

#### ERECTION DRAWINGS

- A. Submit drawings for the Architect/Engineer's benefit as contract administrator or for the Owner.
- B. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
- C. Data indicating inappropriate or unacceptable Work may be subject to action by the Architect/Engineer or Owner.

**END OF SECTION**

## **SECTION 01400**

### **QUALITY CONTROL**

#### **PART 1**

#### **GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Quality assurance - control of installation.
- B. Tolerances
- C. References and standards.
- D. Mock-up.
- E. Inspecting and testing laboratory services.
- F. Manufacturers' field services.

##### **1.2 RELATED SECTIONS**

- A. Section 01300 - Submittals: Submission of manufacturers' instructions and certificates.
- B. Section 01600 - Material and Equipment: Requirements for material and product quality.
- C. Section 01650 - Starting of Systems.

##### **1.3 QUALITY ASSURANCE - CONTROL OF INSTALLATION**

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes or specified requirements indicate higher standards or more precise workmanship.
- E. Perform Work by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

##### **1.4 TOLERANCES**

- A. Monitor fabrication and installation tolerance control of Products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Adjust Products to appropriate dimensions; position before securing Products in place.

1.5 REFERENCES AND STANDARDS

- A. For Products or workmanship specified by association, trade or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current on date for receiving bids or date specified in the individual specification sections, except where a specific date is established by code.
- C. Neither the contractual relationships, duties or responsibilities of the parties in Contract nor those of the Architect/Engineer shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.6 TESTING SERVICES

- A. Contractor to provide all testing services as called out in these specifications.
- B. Testing and source quality control may occur on or off the project site. Perform off-site testing as required by the Architect/Engineer or the Owner.
- C. Testing does not relieve Contractor to perform Work to contract requirements.
- D. Re-testing required because of non-conformance to specified requirements shall be performed by the same MoDOT personnel on instructions by the Architect/Engineer.

1.7 INSPECTION SERVICES

- A. Owner will employ MoDOT Personnel to perform inspection.
- B. Inspecting may occur on or off the project site. Perform off-site inspecting as required by the Architect/Engineer or the Owner.
- C. Inspecting does not relieve Contractor to perform Work to contract requirements.

1.8 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and the balancing of equipment as applicable and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
- C. Refer to Section 01300 - SUBMITTALS, MANUFACTURERS' FIELD REPORTS article.

**PART 2 EXECUTION**

2.1 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.

PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer or conditioner prior to applying any new material or substance in contact or bond.

**END OF SECTION**

## **SECTION 01500**

### **CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Temporary Utilities: Electricity, telephone service, facsimile service and sanitary facilities.
- B. Temporary Controls: enclosures and fencing, protection of the Work and water control.
- C. Construction Facilities: progress cleaning and temporary buildings.

##### **1.2 TEMPORARY ELECTRICITY**

- A. Cost: By Contractor; pay for temporary power service furnished by MoDOT.

##### **1.3 TELEPHONE SERVICE**

- A. Provide, maintain, and pay for telephone service to field office and Architect/Engineer's field office at time of project mobilization.

##### **1.4 FACSIMILE SERVICE**

- A. Provide, maintain and pay for facsimile service and a dedicated telephone line to field office and Architect/Engineer's field office at time of project mobilization.

##### **1.5 TEMPORARY WATER SERVICE**

- A. Connect to existing water source as directed for construction operations at time of project mobilization.
- B. Contractor will reimburse Owner for water used in construction as agreed upon at time of project mobilization.

##### **1.6 TEMPORARY SANITARY FACILITIES**

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.

##### **1.7 FENCING**

- A. Construction: Use plastic mesh safety fencing or better.
- B. Provide 48" high fence around construction site; equip with vehicular and pedestrian gates with locks.

##### **1.8 WATER CONTROL**

- A. Grade site to drain. Maintain excavations free of water. Provide, operate and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

- 1.9 EXTERIOR ENCLOSURES
- A. Provide temporary weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.
- 1.10 PROTECTION OF INSTALLED WORK
- A. Protect installed Work and provide special protection where specified in individual specification sections.
  - B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to prevent damage.
  - C. Provide protective coverings at walls, projections, jambs, sills and soffits of openings.
  - D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage or movement of heavy objects, by protecting with durable sheet materials.
  - E. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
  - F. Prohibit traffic from landscaped areas.
- 1.11 SECURITY
- A. Provide security and facilities to protect Work and existing facilities and Owner's operations from unauthorized entry, vandalism or theft.
  - B. Coordinate with Owner's security program.
- 1.12 ACCESS ROADS
- A. Provide and maintain access to fire hydrants, free of obstructions.
  - B. Provide means of removing mud from vehicle wheels before entering streets.
  - C. Designated existing on-site roads may be used for construction traffic.
- 1.13 PROGRESS CLEANING AND WASTE REMOVAL
- A. Maintain areas free of waste materials, debris and rubbish. Maintain site in a clean and orderly condition.
  - B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces and other closed or remote spaces, prior to enclosing the space.
  - C. Broom and vacuum clean interior areas prior to start of surface finishing and continue cleaning to eliminate dust.
  - D. Collect and remove waste materials, debris and rubbish from site periodically and dispose off-site.
  - E. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.14

**FIELD OFFICES AND SHEDS**

- A. Office: Weather tight, with lighting, electrical outlets, heating and ventilating equipment and equipped with drawing rack and drawing display table.
- B. Provide space for Project meetings, with table and chairs to accommodate 6 persons.

1.15

**REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS**

- A. Remove temporary utilities, equipment, facilities and materials prior to Final Application for Payment inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

**PART 2**

**PRODUCTS**

Not Used.

**PART 3**

**EXECUTION**

Not Used.

**END OF SECTION**



## **SECTION 01600**

### **MATERIAL AND EQUIPMENT**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Products.
- B. Transportation and handling.
- C. Storage and protection.
- D. Product options.
- E. Substitutions.

##### **1.2 RELATED SECTIONS**

- A. Instructions to Bidders: Product options and substitution procedures.
- B. Section 01400 - Quality Control: Product quality monitoring.

##### **1.3 PRODUCTS**

- A. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- B. Provide interchangeable components of the same manufacture for components being replaced.

##### **1.4 TRANSPORTATION AND HANDLING**

- A. Transport and handle Products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to ensure that Products comply with requirements, quantities are correct and products are undamaged.
- C. Provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement or damage.

##### **1.5 STORAGE AND PROTECTION**

- A. Store and protect Products in accordance with manufacturers' instructions.
- B. Store with seals and labels intact and legible.
- C. Store sensitive Products in weather tight, climate controlled, enclosures in an environment favorable to Product.
- D. For exterior storage of fabricated Products, place on sloped supports above ground.
- E. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- F. Cover Products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of Products.

- G. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store Products by methods to prevent soiling, disfigurement or damage.
- I. Arrange storage of Products to permit access for inspection. Periodically inspect to verify Products are undamaged and are maintained in acceptable condition.

## 1.6

### PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any Product meeting those standards or description is acceptable.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions:  
  - Submit a request for substitution for any manufacturer not named in accordance with the following article.

## 1.7

### SUBSTITUTIONS

- A. Architect/Engineer will consider requests for Substitutions only within 15 days after date established in Notice to Proceed.
- B. Substitutions may be considered when a Product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Contractor:
  - 1. Has investigated proposed Product and determined that it meets or exceeds the quality level of the specified Product.
  - 2. Will provide the same warranty for the Substitution as for the specified Product.
  - 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
  - 5. Will reimburse Owner for review or redesign services associated with re-approval by authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request or when acceptance will require revision to the Contract Documents.
- F. Substitution Submittal Procedure:
  - 1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
  - 2. Submit shop drawings, product data and certified test results attesting to the proposed Product equivalence. Burden of proof is on proposer.
  - 3. The Architect/Engineer will notify Contractor in writing of decision to accept or reject request.

**PART 2**

**PRODUCTS**

Not Used.

**PART 3**

**EXECUTION**

Not Used.

**END OF SECTION**

## **SECTION 01650**

### **STARTING OF SYSTEMS**

#### **PART 1                      GENERAL**

##### **1.1                      SECTION INCLUDES**

- A.        Starting systems.
- B.        Demonstration and instructions.
- C.        Testing, adjusting and balancing.

##### **1.2                      RELATED SECTIONS**

- A.        Section 01400 - Quality Control: Manufacturers field reports.
- B.        Section 01700 - Contract Closeout: System operation and maintenance data and extra materials.

##### **1.3                      STARTING SYSTEMS**

- A.        Coordinate schedule for start-up of various equipment and systems.
- B.        Notify Architect/Engineer seven days prior to start-up of each item.
- C.        Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence and for conditions that may cause damage.
- D.        Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E.        Verify that wiring and support components for equipment are complete and tested.
- F.        Execute start-up under supervision of applicable manufacturer's representative or Contractors' personnel in accordance with manufacturers' instructions.
- G.        When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up and to supervise placing equipment or system in operation.
- H.        Submit a written report in accordance with Section 01300 that equipment or system has been properly installed and is functioning correctly.

##### **1.4                      DEMONSTRATION AND INSTRUCTIONS**

- A.        Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of Final Completion.
- B.        For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- C.        Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owners' personnel in detail to explain all aspects of operation and maintenance.

- D. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance and shutdown of each item of equipment at agreed time, at equipment location.
- E. Prepare and insert additional data in operations and maintenance manuals when the need for additional data becomes apparent during instruction.
- F. The amount of time required for instruction on each item of equipment and system that's specified in individual sections.

**PART 2        PRODUCTS**

Not Used.

**PART 3        EXECUTION**

Not Used.

**END OF SECTION**

## **SECTION 01700**

### **CONTRACT CLOSEOUT**

#### **PART 1                      GENERAL**

##### **1.1                      SECTION INCLUDES**

- A.        Closeout procedures.
- B.        Final cleaning.
- C.        Adjusting.
- D.        Project record documents.
- E.        Operation and maintenance data.
- F.        Spare parts and maintenance Products.
- G.        Warranties.

##### **1.2                      RELATED SECTIONS**

- A.        Section 01500 - Construction Facilities and Temporary Controls: Progress cleaning.
- B.        Section 01650 - Starting of Systems: System start-up, testing, adjusting and balancing.

##### **1.3                      CLOSEOUT PROCEDURES**

- A.        Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's review.
- B.        Provide submittals to Owner that is required by governing or other authorities.
- C.        Submit final Application for Payment identifying total adjusted Contract Sum, previous payments and sum remaining due.
- D.        Owner will occupy portions of the building as specified in Section 01010.

##### **1.4                      FINAL CLEANING**

- A.        Execute final cleaning prior to final project assessment. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- B.        Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- C.        Clean or replace filters of operating equipment used during construction and/or adjustment.
- D.        Clean debris from roofs, gutters, downspouts and drainage systems.
- E.        Clean site; sweep paved areas, rake clean landscaped surfaces.
- F.        Remove waste and surplus materials, rubbish and construction facilities from the site.

##### **1.5                      ADJUSTING**

- A.        Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.6

PROJECT RECORD DOCUMENTS

- A. Store record documents separate from documents used for construction.
- B. Record information concurrent with construction progress.
- C. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
  - 1. Manufacturer's name and product model and number.
  - 2. Product substitutions or alternates utilized.
  - 3. Changes made by Addenda and modifications.
- D. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
  - 1. Measured depths of foundations in relation to finish main floor datum.
  - 2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - 4. Field changes of dimension and detail.
  - 5. Details not on original Contract drawings.
- E. Submit documents to Architect/Engineer with claim for final Application for Payment.

1.7

OPERATION AND MAINTENANCE DATA

- A. Submit data bound in 8-1/2 x 11 inch (A4) text pages, three D side ring binders with durable plastic covers.
- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project and subject matter of binder when multiple binders are required.
- C. Internally subdivide the binder contents with permanent page dividers, logically organized; with tab titling clearly printed under reinforced laminated plastic tabs.
- D. Submit 1 draft copy of completed volumes 15 days prior to final inspection. This copy will be reviewed and returned with Architect/Engineer comments. Revise content of all document sets as required prior to final submission.
- E. Submit two sets of revised final volumes, within 10 days after final inspection.

1.8

SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Provide spare parts, maintenance, and extra Products in quantities specified individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.

- E. Maintenance service shall not be assigned or transferred to any agent or Subcontractor without prior written consent of the Owner.

1.9

#### WARRANTIES

- A. Execute and assemble transferable warranty documents from Subcontractors, suppliers and manufacturers.
- B. Submit prior to final Application for Payment.
- C. For items of Work delayed beyond date of Final Completion, provide updated submittal within 10 days after acceptance, listing date of acceptance as start of the warranty period.

#### **PART 2**

#### **PRODUCTS**

Not Used.

#### **PART 3**

#### **EXECUTION**

Not Used.

END OF SECTION



## **SECTION 07900**

### **JOINT SEALERS**

#### **PART 1                      GENERAL**

##### **1.1                      SECTION INCLUDES**

- A.       Sealants and joint backing.
- B.       Precompressed foam sealers.
- C.       Hollow gaskets.

##### **1.2                      RELATED SECTIONS**

- A.       Section 08800 - Glazing: Glazing sealants and accessories.

##### **1.3                      REFERENCES**

- A.       ASTM C834 - Standard Specification for Latex Sealing Compounds.
- B.       ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
- C.       ASTM C1193 - Standard Guide for Use of Joint Sealants.
- D.       ASTM D1056 - Standard Specification for Flexible Cellular Materials - Sponge or Expanded Rubber.
- E.       ASTM D1565 - Standard Specification for Flexible Cellular Materials -Vinyl Chloride Polymers and Copolymers (Open-Cell Foam).
- F.       ASTM D1667 - Standard Specification for Flexible Cellular Materials -Vinyl Chloride Polymers and Copolymers (Closed-Cell Foam).

##### **1.4                      QUALITY ASSURANCE**

- A.       Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years experience.
- B.       Applicator Qualifications: Company specializing in performing the work of this section and approved by manufacturer.

##### **1.5                      ENVIRONMENTAL REQUIREMENTS**

- A.       Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

##### **1.6                      COORDINATION**

- A.       Section 01039 - Coordination and Meetings: Coordination requirements.
- B.       Coordinate the work with all sections referencing this section.

- 1.7            **WARRANTY**
- A.        Section 01700 - Warranties.
  - B.        Correct defective work within a five-year period after Date of Completion.
  - C.        Warranty: Include coverage for installed sealants and accessories which fail to achieve airtight seal and exhibit loss of adhesion or cohesion or do not cure.
- 1.8            **SEALANTS**
- A.        Type I - General Purpose Exterior Sealant: Polyurethane or Polysulfide; ASTM C920, Grade NS, Class 25, Uses M, G and A; single or multi- component.
    - 1.            Standard colors matching finished surfaces.
  - B.        Type IV - General Purpose Interior Sealant: Acrylic emulsion latex; ASTM C834, single component, paintable.
    - 1.            .Standard colors matching finished surfaces. Applications: Use for:
      - a.            Joints between door and wall surfaces.
- PART 2                            PRODUCTS**
- 2.1            **ACCESSORIES**
- A.        Primer: Non-staining type, recommended by sealant manufacturer to suit application.
  - B.        Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer; compatible with joint forming materials.
  - C.        Joint Backing: Round foam rod compatible with sealant; ASTM D1056, sponge or expanded rubber; oversized 30 to 50 percent larger than joint width.
  - D.        Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.
- PART 3                            EXECUTION**
- 3.1            **EXAMINATION**
- A.        Verify that substrate surfaces and joint openings are ready to receive work.
  - B.        Verify that joint backing and release tapes are compatible with sealant.
- 3.2            **PREPARATION**
- A.        Remove loose materials and foreign matter that might impair adhesion of sealant.
  - B.        Clean and prime joints in accordance with manufacturer's instructions.
  - C.        Perform preparation in accordance with manufacturer's instructions and ASTM C1193.
  - D.        Protect elements surrounding the work of this section from damage or disfiguration.
- 3.3            **INSTALLATION**
- A.        Perform installation in accordance with sealant manufacturer's requirements for preparation of surfaces and material installation instructions.
  - B.        Perform installation in accordance with ASTM C1193.

- C. Measure joint dimensions and size joint backers to achieve width-to-depth ratio, neck dimension, and surface bond area as recommended by manufacturer, except where specific dimensions are indicated.
- D. Install bond breaker where joint backing is not used.
- E. Install sealant free of air pockets, foreign embedded matter, ridges and sags.
- F. Apply sealant within recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- G. Tool joints concave.
- H. Pre-compressed Foam Sealant: Do not stretch; avoid joints except at corners, ends, and intersections; install with face 1/8 to 1/4 inch below adjoining surface.
- I. Compression Gaskets: Avoid joints except at ends, corners, and intersections; seal all joints with adhesive; install with face 1/8 to 1/4 inch below adjoining surface.

#### 3.4 CLEANING

- A. Clean adjacent soiled surfaces.

#### 3.5 PROTECTION OF FINISHED WORK

- A. Protect sealants until cured.

**END OF SECTION**

## **SECTION 08360**

### **SECTIONAL OVERHEAD DOORS**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Electric overhead sectional door.
- B. Operating hardware, supports and controls.

##### **1.2 RELATED SECTIONS**

- A. Section 05500 - Metal Fabrications: Steel channel opening frame.
- B. Section 08710 - Door Hardware: Cylinder locks.
- D. Section 16100 – Electrical: Wiring.

##### **1.3 REFERENCES**

- A. ANSI A216.1 - Sectional Overhead Type Door (NAGDM 102).
- B. ASTM A526/A526M - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Commercial Quality.
- C. NEMA MG 1 - Motors and Generators.
- D. NFPA 70 - National Electrical Code. Conform to BOCA code for motor and motor control requirements. Listed and classified by Underwriters Laboratories, Inc.

##### **1.4 SYSTEM DESCRIPTION**

- A. Panels: Insulated with glazed panels.
- B. Lift Type: Standard lift operating style with track and hardware.
- C. Operation: Electric.
- D. Loads: Design and size components to withstand dead and live loads caused by pressure and suction of wind acting normal to plane of wall as calculated in accordance with BOCA code.

##### **1.5 SUBMITTALS FOR REVIEW**

- A. Section 01300 - Submittals: Procedures for submittals.
- B. Shop Drawings: Indicate opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations and installation details.
- C. Product Data: Provide component construction, anchorage method and hardware.
- D. Samples: Submit two exterior and interior panel finish samples, 18 x 18 inches in size, illustrating color and finish.

## 1.6 SUBMITTALS AT PROJECT CLOSEOUT

- A. Section 01700 - Operation and Maintenance Data: Procedures for submittals.
- B. Operation Data: Include electrical control adjustments.
- C. Maintenance Data: Include data for motor and transmission, shaft and gearing, lubrication frequency, spare part sources.
- D. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

## 1.7 QUALITY ASSURANCE

- A. Perform Work in accordance with ANSI A216.1, Application Type: Industrial. Maintain one copy on site.
- B. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years experience.
- C. Installer: Company specializing in performing the work of this section and approved by manufacturer.

## 1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials and products in labeled protective packages. Store and handle in strict compliance with manufacturer's instructions and recommendations. Protect from damage from weather, excessive temperatures and construction operations.

## 1.9 WARRANTY

- A. Section 01700 - Warranties.
- B. Correct defective Work within a one-year period after Date of Substantial Completion.
- C. Warranty: Include coverage for electric motor and transmission.
- D. Provide a one-year manufacturer warranty for electric operating equipment.

# PART 2 PRODUCTS

## 2.1 SECTIONAL OVERHEAD DOORS

- A. Provide standard sectional overhead doors of the dimensions and arrangements shown on the drawings, and with the following attributes: Equal to Overhead Doors Inc., 592 Series, Thermacore Insulated Steel Sectional Door.
  - 1. Design wind load: Comply with NAGDM specification 102-1976, except that minimum wind load shall be 80 mph.
  - 2. Door sections:
    - a. Exterior: Roll-form from .016" hot-dip galvanized steel, with integral reinforcing ribs consisting of six longitudinal ribs and two flat bottom V-grooves.
    - b. Provide meeting rails of double-rabbeted weatherproof interlocking joints functioning as integral struts and assuring alignment full width of each section.
    - c. Provide a total thickness of 2", R-Value 17.50. U-Value of .067.
  - 3. Glass openings: Provide insulated glass, sealed in automotive type rubber gaskets of the maximum size allowable, three per door in the 3<sup>rd</sup> section panel, size 24" x 7".

4. Track and Hardware:
    - a. Tracks shall be 2" wide galvanized steel, mounted by continuous galvanized steel angle.
    - b. Stainless Steel lift cables shall have a safety factor of 8 to 1.
    - c. Roller shall be full-floating ball bearings with hardened steel racers.
    - d. Counterbalance shall consist of a torsion spring mounted on a continuous thru solid steel shaft.
    - e. Provide interior side locking device, which with a slide bar extends through the left and right side tracks.
    - f. Astragal - Provide "U" type rubber astragal at the bottom edge of each door or an approved equal.
  5. Finish: Provide the manufacturer's standard pre-finish system in color selected by the owner from the manufacturer's standard colors.
  6. Insulation: Rigid foamed-in-place 2" thick polyurethane core free of CFC's and will be fully encapsulated in non-permeable materials to prevent loss of thermal efficiency over time. Insulation shall have a back cover of 26-gauge steel.
  7. Electric Sensing Edge: Provide for each door. Provide safety edges by Air Wave, Miller Edge, Model number AW14K500 with coil cord or equal, extending the full width of the door. Upon contact with an obstruction the downward travel of the door shall be stopped or reversed.
  8. Weather strip
    - a. Between sections will be EPDM rubber tube seals fitted every joint.
    - b. Jamb seals. Provide pliable bulb seals.
  9. Springs: Springs will be 25,000 cycles.
- B. The following door sizes are approximate for bidding purposes only, contractor may wish to verify sizes prior to bidding. Contractor will be responsible for exact measurements prior to ordering of doors.
1. Belle – 5 doors @ 12'-0" wide x 12'-0" high.
  2. Brazito – 6 doors @ 12'-0" wide x 12'-0" high.
  3. Eldon – 5 doors @ 12'-0" wide x 12'-0" high.
  4. Iberia – 6 doors @ 12'-0" wide x 12'-0" high.
  5. New Bloomfield – 5 doors @ 12'-0" wide x 12'-0" high.
  6. Stover – 7 doors @ 12'-0" wide x 12'-0" high.

## 2.2 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.
- B. Sheet Steel: ASTM A526/A526M galvanized to G60, pre-coated with silicone polyester finish, plain surface.
- C. Exterior Surfaces: Factory painted.
- D. Interior Surfaces: Factory painted.

## **PART 3        EXECUTION**

### **3.1        EXAMINATION**

- A.        Section 01039 - Coordination and Meetings: Verification of existing conditions before starting work.
- B.        Verify that wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.
- C.        Verify that electric power is available and of the correct characteristics.

### **3.2        PREPARATION**

- A.        Replace portions of existing overhead track blocking that are damaged, rotted, or showing other imperfections. It is the contractors responsibility to examine and verify prior to bidding.
- B.        Prepare opening to permit correct installation of door unit to perimeter air and vapor barrier seal.

### **3.3        INSTALLATION**

- A.        Install door unit assembly in accordance with manufacturer's instructions.
- B.        Anchor assembly to wall construction and building framing without distortion or stress.
- C.        Securely brace door tracks suspended from structure. Secure tracks to structural members only.
- D.        Fit and align door assembly including hardware.
- E.        Contractor to provide new breakers at the service panel, new wiring and conduit to a contractor supplied disconnect at the door operator. All wiring shall comply with the latest edition of the National Electric Code.
- F.        Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
- G.        Install perimeter trim and closures.

### **3.4        ERECTION TOLERANCES**

- A.        Section 01400 - Quality Assurance: Tolerances.
- B.        Maximum Variation from Plumb: 1/16 inch.
- C.        Maximum Variation from Level: 1/16 inch.
- D.        Longitudinal or Diagonal Warp: Plus or minus 1/8 inch from 10 ft straight edge.
- E.        Maintain dimensional tolerances and alignment with adjacent work.

### **3.5        MANUFACTURER'S FIELD SERVICES**

- A.        Section 01650 - Starting of Systems: Prepare and start systems.
- B.        Ensure the operation and adjustments to door assembly for specified operation.

### **3.6        ADJUSTING**

- A.        Section 01650 - Starting of Systems: Adjusting installed work.
- B.        Adjust door assembly to smooth operation and in full contact with weather stripping.

3.7 CLEANING

- A. Section 01700 - Contract Closeout: Cleaning installed work.
- B. Clean doors, frames and glass.
- C. Remove temporary labels and visible markings.

3.8 PROTECTION OF FINISHED WORK

- A. Section 01700 - Contract Closeout: Protecting installed work.
- B. Do not permit construction traffic through overhead door openings after adjustment and cleaning.

3.9 SCHEDULES

Refer to Door Schedule on Architectural Drawings

**END OF SECTION**



## **SECTION 08720**

### **ELECTRIC DOOR OPERATORS**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

- A. Connect existing electric trolley type sectional overhead door operator, as specified herein and as needed for a complete and proper installation.
- B. Related work:
  - 1. Documents affecting work of this Section include but are not necessarily limited to, General Conditions, Supplementary Conditions and Sections in Division 1 of these Specifications.

##### **1.2 QUALITY ASSURANCE**

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. Comply with all governmental agencies having jurisdiction in this work.

#### **PART 2 PRODUCTS AND MATERIAL**

##### **2.1 ELECTRIC DOOR OPERATORS**

- A. Existing operators

##### **2.2 OTHER MATERIALS**

- A. Provide other materials, not specifically described but required for a complete and proper connection.

#### **PART 3 EXECUTION**

##### **3.1 SURFACE CONDITIONS**

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

##### **3.2 INSTALLATION**

- A. Electricity is already run to the electric door operator. Final connection to the door operator shall be the responsibility of the overhead door installer.

##### **3.3 ADJUSTMENTS AND INSTRUCTIONS**

- A. Demonstrate to the owner that all operators function to the same level of performance prior to the work.

**END OF SECTION**

**SECTION 08800  
GLAZING**

**PART 1                      GENERAL**

1.1                      SECTION INCLUDES

- A.              Glass and glazing for doors.

1.2                      RELATED SECTIONS

- A.              Section 08360 - Sectional Overhead Doors.

1.3                      REFERENCES

- A.              ANSI Z97.1 - Safety Performance Specifications and Methods of Test for Safety Glazing Used in Buildings.
- B.              ASTM C669 - Glazing Compounds for Back Bedding and Face Glazing of Metal Sash.
- C.              ASTM C804 - Use of Solvent-Release Type Sealants.
- D.              ASTM C1036 - Flat Glass.
- E.              ASTM C1048 - Heat-Treated Flat Glass - Kind HS, Kind FT Coated and Uncoated Glass.
- F.              ASTM C1172 - Laminated Architectural Safety Glass.
- G.              ASTM E84 - Surface Burning Characteristics of Building Materials.

1.4                      QUALITY ASSURANCE

- A.              Installer Qualifications: Company specializing in performing the work of this section with minimum three years experience.

1.5                      ENVIRONMENTAL REQUIREMENTS

- A.              Section 01600 - Material and Equipment: Environmental conditions affecting products on site.
- B.              Do not install glazing when ambient temperature is less than 50 degrees F.
- C.              Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.6                      WARRANTY

- A.              01700 - Warranties and Bonds.
- B.              Provide a five (5) year warranty to include coverage for sealed glass units from seal failure, interpane dusting or misting and replacement of it.
- C.              Provide a five (5) year warranty to include coverage for delamination of laminated glass and replacement of it.

**PART 2****PRODUCTS****2.1 FLAT GLASS MATERIALS**

- A. Float Glass (Type FG-A): Clear.

**PART 3****EXECUTION****3.1 EXAMINATION**

- A. Section 01039 - Coordination and Meetings: Verification of existing conditions before starting work.
- B. Verify that openings for glazing are correctly sized and within tolerance.
- C. Verify that surfaces of glazing channels or recesses are clean, free of obstructions that may impede moisture movement; weeps are clear and ready to receive glazing.

**3.2 PREPARATION**

- A. Clean contact surfaces with solvent and wipe dry.
- B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
- C. Prime surfaces scheduled to receive sealant.
- D. Perform installation in accordance with ASTM C804 for solvent release sealants.

**3.3 INSTALLATION - INTERIOR WET/DRY METHOD (TAPE AND SEALANT)**

- A. Cut glazing tape to length and install against permanent stops, projecting 1/16 inch above sight line.
- B. Place setting blocks at 1/4 points with edge block no more than 6 inches from corners.
- C. Rest glazing on setting blocks and push against tape to ensure full contact at perimeter of pane or unit.
- D. Install removable stops, spacer shims inserted between glazing and applied stops at 24 inch intervals, 1/4 inch below sight line.
- E. Trim protruding tape edge.

**3.4 CLEANING**

- A. Remove glazing materials from finish surfaces.
- B. Remove labels after Work is complete.
- C. Clean glass and adjacent surfaces.

**END OF SECTION**